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# HITTITE ETYMOLOGIES AND NOTES* 

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#### Abstract

Discussed are the etymologies of twelve Hittite words and word groups (alpa- 'cloud', aku- 'seashell', ariye/a-zi 'determine by or consult an oracle', heu- / he(y)aw- 'rain', hāli'pen, corral', kalmara- 'ray' etc., māhla- 'grapevine branch', sūu, sūwaw- 'full', tarra-ta(ri) 'be able' and tarhu-zi 'id.; conquer', idālu- 'evil', tara- ${ }^{-}$/ tari- 'become weary, henkan 'death, doom') and some points of Hittite historical phonology, such as the fate of medial ${ }^{*}-h_{2} n$ - (sub $\$ 7$ ) and final ${ }^{*}-i(\$ 13)$, all of which appear to receive somewhat inadequate treatment in Kloekhorst's 2008 Hittite etymological dictionary. Several old etymologies are defended and some new ones suggested.


The following notes were compiled while writing a response (in press $b$ ) to that part of the (2006) paper, recently kindly brought to my attention by its author, Professor Witold Mańczak, that purports to unseat the laryngeal theory on the basis of allegedly incompatible Hittite material collected over three decades ago by Tischler (1980). The massive debate on the laryngeal theory that essentially followed Tischler's paper was no doubt in part a response to it and produced solutions to most if not all of the problems raised by Tischler, a position I attempt to summarize in my own paper noted above with reference to the superb Hittite etymological dictionary recently published by Kloekhorst (2008, hereinafter referred to as K:) with its several innovations in the areas of Hittite and Anatolian historical phonology and morphology. It seemed to me, however, as I examined his book, that Kloekhorst

[^0]had not quite achieved finality in a small proportion of the well over 100 decisions that I was thus compelled to evaluate, but instead of burying my suggestions for improvement in an essentially polemical paper it seemed to me preferable to offer them under a separate title here. The thirteen matters investigated below are of course very far from constituting an exhaustive critique of Kloekhorst's dictionary.

## 1. alpa- 'cloud'

In order to debunk the eminently debunkable idea of " $h_{4}{ }^{" 1} \mathrm{~K}: 169$ rejects the comparison (due to Mudge) with Lat. albus 'white', Gk. $\dot{\alpha} \lambda \varphi o ́ \varsigma ~ ' w h i t e ~ l e p r o s y ', ~ a c c . ~ p l . ~$ $\dot{\alpha} \lambda \varphi o u ́ \varsigma ~ ' w h i t e ' ~ p a r t l y ~ o n ~ e a s i l y ~ o v e r c o m e ~ f o r m a l ~ g r o u n d s ~(s e e ~ b e l o w) ~ a n d ~ p a r t l y ~$ on more interesting semantic grounds based on Puhvel's (1984-, 1:37) remark that "the dominant Hittite association of clouds with rain and thunder does not advocate 'whiteness'". More accurate glossing of the Latin and Greek comparanda as 'dull white' and 'dull-white leprosy', etc. (AR), together with such comparisons as OCS mrakz 'darkness' : Cz. mrak 'cloud' and ODan. moln 'darkness' : Sw. moln 'cloud' (AR) turns Puhvel's objection on its head by emphasizing how much worse is the fit between the same somewhat unremarkable association and Couvreur's connection with words meaning 'weak' (Lith. alpùs) and 'small' (Ved. álpa-), which Puhvel reports with seeming approval.

Čop's connection, also reported favourably by Puhvel, with Serbian lâp (not Puhvel's **lăp) 'boggy, slushy ground; bog, marsh', SCr. läpav(-) 'boggy, slushy' and läpavica 'slush; sleet', these last two exhibiting shortening of the initial syllable in polysyllabic forms, Bulg. lapàvica 'id.', all < PSlavic *olp- < PIE *Holp-, allegedly related to Gk. $\lambda \dot{\alpha} \pi \eta$ 'scum that forms on the surface of standing liquids such as wine and vinegar' (and that is typically light coloured), is semantically apt and well supported by the proffered semantic comparison with Lith. makõné 'puddle' : Latv. màkuonis, (metatonic) mãkuonis 'dark cloud' (see Derksen 1996: 277f.), the chief problem with which being that there is no way of getting $\lambda \dot{\alpha} \pi \eta$ from ${ }^{\star} H l p-$, even if we could use the well known possibility of connecting words meaning 'wetlands' with those meaning 'shine, glow', e.g. PSlavic ${ }^{\star}$ bòlto 'marsh, bog, swamp' : *bél- 'white' (Derksen 2008 s.vv.) in order to overcome Beekes' (2010 s.v.) reliance on the parallel form $\lambda \dot{\alpha} \mu \pi \eta$ to classify $\lambda \dot{\alpha} \pi \eta$ as "Pre-Greek" substrate so that we could claim $\lambda \dot{\alpha} \mu \pi \eta$ to have arisen from $\lambda \dot{\alpha} \pi \eta$ under the influence of $\lambda \dot{\alpha} \mu \pi \omega$ 'lighten, glow'. In other words, this etymology depends entirely on an assertion of the antiquity of the South Slavic items, unless it can be argued that these belong with Couvreur's suggestion.

[^1]On the other hand, the semantic component of Čop's etymology offers further confirmation of the folly of Puhvel's objection to Mudge by indicating an alternative semantic route 'whiteness' $\rightarrow$ 'wetlands' $\rightarrow$ 'dark cloud', which is also not harmed by invoking the transferred meanings of Eng. wool-pack, viz. (1) 'large mass of white water', (2)'fleecy cumulus cloud' (OED 1971 s.v.). Returning therefore with renewed enthusiasm to Lat. albus, Gk. $\dot{\alpha} \lambda \varphi o ́ \varsigma$, we find that Schrijver (1991: 40, 66) suggests starting from either the full or the zero grade of the root for these, while de Vaan (2008 s.v.), Beekes (2010 s.v.) and the present writer are happy to support the o-grade ${ }^{*} h_{2} o l b^{h}$ - o-s for our Hittite word. Indeed we can go further: AR notes the oxytone indicated by the spelling al-pa-a-aš cited at K: 169; consequently I believe we can safely reconstruct ${ }^{\star} h_{2} o l b^{h}-o ́-s$, which agrees, at least superficially with the accent place of the Greek forms. K: 213 explicitly indicates his acceptance of o-grade $o$-stems in Hittite even if this acceptance seems at times somewhat tentative as in "PIE *uos- $b^{h}$ O- ?" (K: 984) > Hitt. waspa- 'clothing'. ${ }^{2}$

There are thus two or three possible etymologies of Hitt. alpa- none of which requires " $h_{4}$ ", preference going, I believe, first to Mudge's widely accepted Lat. albus, Gk. ả $\lambda \varphi o ́ \varsigma, ~ f o l l o w e d ~ b y ~ C o u v r e u r ' s ~ V e d . ~ a ́ l p a-, ~ L i t h . ~ a l p u ̀ s ~(a n d ~ S e r b . ~ l a ̂ p ?) . ~$

## 2. aku-'sea-shell'

According to K: 168, the abandoning of the meaning 'stone' in favour of 'sea-shell' adds semantic implausibility to the formal difficulties of connection with PIE ${ }^{*} h_{2} e \hat{k}$ - 'sharp'.

I believe suggestions for overcoming the semantic objection can be obtained by examining some of the more developed meanings of generally acknowledged derivatives of the said PIE root. Thus Gk. व̈к $\kappa \rho \varsigma$ 'at the farthest point, topmost, outermost' retains the notion of sharpness or rather pointiness in the substantivizations $\ddot{\alpha} \kappa \rho \alpha$ and äк $\rho o v$ 'headland, cape' (Beekes 2010 s.v.) but loses it in expressions such as $\lambda \dot{\alpha} \psi o v \tau \varepsilon \varsigma \ldots \mu \dot{\varepsilon} \lambda \alpha v v ̋ \delta \omega \rho \mid \ddot{\alpha} \kappa \rho \rho v\left(\Pi_{162}\right)$ 'lapping at the surface of the dark water',
 edge of the plain' (Soph., Ant. 1197), $\kappa \alpha \tau$ ' $\alpha \kappa \kappa \alpha \varsigma \sigma \pi \iota \lambda \alpha \dot{\alpha} \delta o \varsigma^{\prime}$ from the surface of a stone' (Id., Tr. 678) (examples from LSJ s.v.), these last essentially signifying 'outer layer of'

[^2]and indicating how a root apparently having the original meaning 'sharp' or 'point' can come to refer to something that is not sharp or pointed. The surface of the skin is in fact the outer surface of a body, which is what a sea-shell is in relation to the rest of the animal within.

Lat. acus f. $u$-stem 'needle', m. $o$-stem 'a sea-fish with pointed snout', n. $s$-stem 'husk of grain or pulse'. The semantics of all three no doubt depends on the pointiness of the items referenced, a notion that would go well with certain kinds of seashells also enclosing food in a similar way, such as the mussel or the periwinkle. The designation could then have spread from that kind of shell to denote other kinds of shells, much as Eng. shell originates in *skel- 'split' (AR) and presumably referred originally only to bivalves.

These examples suggest that in Hitt. aku-we are looking at a substantive or substantivized adjective meaning either 'external surface' or 'pointed thing'. Since speakers of Latin used the notion 'pointed thing' to refer to the capsules enclosing (edible) peas and beans, this provides the closest parallel to our proposal that the Hittites might have used a similar notion to refer to the capsule containing an (edible) shellfish.

I think the formal development can be compared with that of the Vedic group á́yu-n. 'life, lifetime’ beside āyú- 'living, movable, lively', m. 'living being, man' which reflects generalized o-grade ${ }^{*} h_{2} o i$-( $u$-) of the root beside the generalized $e$-grade ${ }^{\star} h_{2} e i$-(u-) found in Gk. $\alpha i \omega \omega v$ 'time, lifetime etc.', Lat. aevum n. aevus m. 'period of time etc.' etc. Thus for our Hittite word we have generalized o-grade ${ }^{*} h_{2} o \hat{k}$ - in PAnat. *ァóku- 'point(?)' which, before disappearing, managed to generalize the regular lenition of its medial stop to *?okkú- 'pointed’ > *?okú- c. 'pointed thing, mussel shell’ > Hitt. aku- 'shell'. ${ }^{3}$

## 3. ariye/a-zi 'determine by oracle; consult an oracle'

K: 202f. derives this from PIE ${ }^{*} h_{1} r h_{1}$-ie/o-> Gk. (Hom.) $\varepsilon \rho \varepsilon ́ \omega$ 'ask', agreeing with LIV $_{2}$ : 251. Beekes, however (2010 s.v. $\varepsilon$ eipou $\mu \iota$ ), on good evidence reconstructs the Greek word as ${ }^{\star} h_{1} r(e) u$ - and finds no direct cognates outside Greek, with the possible exception of ON raun 'attempt, test', thus leaving the Hittite word without etymology. Since with no etymology there is no proof of the alleged anlaut ${ }^{*} h_{1^{-}}$ (Woodhouse 2011a: 158-162), this should be removed from both reconstructions. Kloekhorst does well to reject other proposed etymologies, although it should be noted that de Vaan (2008 s.v.) is prepared to separate Oscan 3 .sg.fut.pf. urust 'prosecute (orally)' from Lat. ōrāre 'pray' deriving the latter from ōs, ōris 'mouth' and that Gk. $\dot{\alpha} \rho \eta^{\prime}$ 'prayer' actually conceals Ionic $\dot{\alpha} \rho \dot{\eta}^{\prime}$, Attic $\dot{\alpha} \rho \dot{\alpha}$, Arcadian ${ }^{*} \dot{\alpha} \rho F \dot{\alpha}$, the root being thus ${ }^{\star} h_{2} e r u-(B e e k e s ~ 2010 ~ s . v . ~ \dot{\alpha} \rho \dot{\alpha})$, probably present also in Luv.

[^3]hīrūt- 'oath' (AR), and so even more unsuitable as a congener of the Hittite word than Kloekhorst thought. ${ }^{4}$

De Vaan (2008 s.v.), on the other hand, suggests that Lat. reor, rērī, rătus 'think, believe' could be connected with our Hittite word but, no doubt with Kloekhorst's failed etymology in mind, sees the semantic connection being 'ask, investigate'. A much better semantic basis, in view of Lat. rătus 'determined', ratio 'calculation, account' (loanw. Goth. rapjo 'number, account'?) is 'count, reckon, determine' cf. the first part of our gloss above 'determine by oracle'. This is an action that can hardly be contemplated in the absence of the implied, and therefore secondary, meaning 'consult an oracle'. For what other purpose does one consult an oracle other than to receive a pronouncement putatively conducive to determining a course of action? Further, Lat. rătus, with its short root vowel representing the zero grade, also confirms the reconstruction ${ }^{*} r h_{1} t$ - without any anlaut laryngeal. The correspondence is then both semantically and formally exact, except for the difference in stem formation, e.g. present Lat. $<{ }^{\star} r e h_{1}$-ie/o-, Hitt. $<{ }^{*} r h_{1}$-ie/o-.

## 4. hēu- / hē(y)aw- 'rain'

K: 34of. accepts Melchert's (1994: 102) tentative connection with Gk. גiovó $\omega$ 'moisten' < PIE ${ }^{\star} h_{2}$ eih $h_{3}$-, admitting that it is nevertheless questionable whether yod would be retained in the proposed Gk. protoform ${ }^{*} h_{2}$ eih $_{3}$. I believe it would not and, building on Kloekhorst's and Melchert's reconstruction, originally proposed the following two somewhat complicated solutions to the problem.

The first was to assume for the Greek denominative a (late or levelled) protoype ${ }^{*} h_{2}$ eih $h_{1} h_{3}$-neh $h_{2}$-ie/o- in which ${ }^{\star} h_{3}$ adjacent to consonantal ${ }^{*} n$ would be vocalized to ${ }^{*} o$ leaving ${ }^{\star} h_{1}$ as the syllable onset following the diphthong ${ }^{\star} e i>{ }^{\star} a i$ after ${ }^{\star} h_{2}$ and thus yielding aiová $\omega$ directly. Based on Kloekhorst's ${ }^{\star} h_{2} e e_{h_{3}}-(e) u$-, this would entail accepting ${ }^{\star} h_{2} e i h_{1} h_{3}$-(e)u-as the prototype of the Hittite word and the assumption that medial ${ }^{\star}-h_{1} h_{3}$ - in contact with $i / u$ yields PAnat. ${ }_{-}->$- just as single ${ }^{\star}-h_{3}$ - does. This is a reasonable assumption given that anlaut ${ }^{*} h_{1} h_{3} i$ - must yield PAnat. ${ }^{*}$ i- in Kloekhorst's (2008: 165) tentatively reconstructed ${ }^{*} h_{1} h_{3} i-n e u->$ Hitt. ${ }^{*} i-n u$-. For the root structure, cf. LIV's ${ }^{*} h_{2}$ uerh $_{1^{-}}$, with two resonants and two laryngeals, beside ${ }^{*}$ mieuh $_{1^{-}}$, ${ }^{*} m_{l e u h_{2}-}$ and ${ }^{*}$ melh $_{2} u-$-, each with three resonants and one laryngeal, the converse of which is our ${ }^{\star} h_{2} e i h_{1} h_{3^{-}}$, with one resonant and three laryngeals.

The second, and perhaps more difficult, solution was to assume that the prototype of the Greek word has the full grade vowel following ${ }^{\star} h_{3}$, which in turn presupposes a consonant liable to vocalization before $i$, in other words another laryngeal. The anlaut laryngeal remains $h_{2}$ yielding Hitt. $h$-. The other laryngeal can be $h_{1}$, the vocalization of which in Greek will be affected by the adjacent $h_{2}$ in accordance with Eichner's (1988: 131) laryngeal hierarchy, thus ${ }^{\star} h_{2} h_{1} h_{3}$ én $\left(h_{2}\right)>{ }^{\star} \alpha i o ́ v(\alpha)$-before

[^4]the regularization of Greek verbal accent. The Hittite forms would show generalization of the full grade root ${ }^{*} h_{2} h_{1} e ́ h_{h_{3}}-(e) u$ - with assimilation to ${ }^{*} h_{2} h_{2} \dot{e} i h_{3}$-(e)u-> ${ }^{*} h_{2}{ }^{e} i h_{3_{3}}$-e)u- etc., as before.

AR, however, finds these suggestions unconvincing and proposes instead the beautifully simple reconstruction ${ }^{*} h_{2} e i-u-o n-\bar{a}$ - for the Greek, with, presumably, concomitant emendation of Kloekhorst's protoforms to nom.sg. $h_{2} e \bar{i}-u-s,{ }_{2} h_{2}-$ éu-és. The only credit the present author can perhaps claim is that it was his clumsy efforts that seemingly prompted AR to produce such an elegant solution.

## 5. hāli- 'pen, corral (for cows and horses)'

K: (chiefly) 343, (less fully) 273 rightly rejects the old connection between this word and hilla- 'courtyard' because Melchert no longer supports the idea that Hitt. *hē > ${ }^{* *} h \bar{i}$ and Kloekhorst rejects the development PIE ${ }_{h_{2 / 3}} \bar{e}>$ Hitt. ${ }^{* *} h \bar{e}$. This leaves hāliwithout an etymology since Kloekhorst dismisses Puhvel's (1984-, 3: 27f.) generally well motivated support for a connection with Gk. $\dot{\alpha} \lambda \omega \eta^{\prime}$ 'threshing-floor, any prepared ground, garden, orchard, halo of sun or moon, etc.', $\alpha \lambda \omega \varsigma$ ' threshing floor, grain on floor, disk of sun or moon or shield, halo, etc.' - a connection due explicitly to two other, apparently francophone, scholars - with the following statement ( $\mathrm{K}: \mathbf{2 7 2 \mathrm { f } \text { ).: }}$

Puhvel translates this word as 'lunar halo (in omina)' as well, but only refers to KUB 8.3 rev . (5) [...] for this meaning, of which $\mathrm{HW}_{2}(\mathrm{H}: 30)$ states that it must be regarded as belonging with hāli- 'night watch (as time measurement)'. Puhvel's etymological connection with Gr. $\alpha \boldsymbol{\lambda} \omega \varsigma$ ' 'halo' therefore becomes impossible.

Surely Kloekhorst cannot mean that there is a semantic objection to connecting a Hittite word meaning 'halo' with a Greek word having the same meaning. Kloekhorst must surely have lost his way in his first, rather long sentence; or have misinterpreted the passage in question, which actually $\left(\mathrm{HW}_{2} 3: 30 \mathrm{a}\right.$ s.v. hali-1 "Hürde ..." 0.1 Lit.) reads:

Goe. NBr (1930) 67 m. A. 1 „Stall" sowie „Mondhof ", sachlich identisch mit akkad. tarbaṣu [nach KUB VIII 3 Rs. iff.; gemeint ist dort aber hali-2 „(Nacht-)Wache" als Zeitraum].

Since Akkad. tarbaṣu means both 'various kinds of enclosures' and 'lunar halo' but not ${ }^{* *}$ 'night watch' (von Soden 1965: 1327f.) this note brackets these first two meanings together and presents 'night watch' as a third meaning, the correct one for the cited context. i.e. Puhvel's translation is not being apportioned to a different homonym, it is just not being supported. Thus Kloekhorst's powers of English expression have let him down here. Instead of writing "of which $\mathrm{HW}_{2}(\mathrm{H}: 30)$ states that it must be regarded as belonging with" Kloekhorst should have written "whereas $\mathrm{HW}_{2}(\mathrm{H}: 30)$ states that the word in this context is". Altogether the meaning 'lunar halo' seems to be mentioned as only as an historical curiosity and is discounted by $\mathrm{HW}_{2}$ for all three of the hali-homonyms it lists.

But even if the meaning 'halo' is off the scene for Hittite, this does not rule out equating a Hittite word meaning 'pen for cows or horses' with similar Greek words meaning 'threshing floor', since large animals were regularly employed on the threshing floor to do the threshing, certainly in ancient Egypt and in the East generally either to the present day or at least until the late $20^{\text {th }}$ century (EB 1975, 5: 971). One of the Greek words also means 'prepared ground, garden, orchard, vineyard', the primary meaning behind all of which, as Beekes (2010 s.v. $\dot{\alpha} \lambda \omega \dot{\eta}$ ) conjectures without appearing to consult the Hittite word and its meanings, was 'a small piece of land near the farm, used for growing fruits and vegetables (garden) and for threshing". Beekes (ibid.) is also prepared, if only tentatively, to reconstruct ${ }^{*} h_{2}(e) l$ - and a paradigm involving an ablauting suffix *-ōu- $/^{*}-o u-/^{*}-u$-. The Hittite word then appears to differ only in having the suffix ${ }^{*}-i$ - and to have progressed semantically from 'enclosure in which large livestock may be found threshing' to 'enclosure for holding large livestock', i.e. a similar structure with a different purpose. It is significant that a different word (Hitt. asāwar, asaun-) was used for a pen designed to hold sheep and goats, i.e. lighter animals not suitable for the task of threshing.

## 6. kalmara- 'ray', kalmi-'piece of firewood', kalmis(a)na/i- 'id., brand, (fire)bolt' (Kloekhorst's glosses)

K: 431 rejects the commonly accepted connection with Gk. $\kappa \alpha \dot{\lambda} \lambda \alpha \mu$ ৎ 'reed', Russ. solóma 'straw' etc. $<\operatorname{PIE} \star \hat{k}(o) l h_{2}$-mo- on the basis that in these languages the etymon contains no semantic feature of 'glowing' or 'burning'. Unfortunately for Kloekhorst's argument, it doesn't need to - as a brief examination of Kloekhorst's glosses and other synonyms will show.

The word ray itself occupies a somewhat special, not to say ambiguous position. To begin with, although the earliest recorded meaning of its earliest agreed etymon, viz. Lat. radius, is 'ray of light' attested in Plautus (Glare 1980 s.v.), all the attempts at etymologizing radius summarized and rejected by Walde/Hofmann (1965 s.v.; and by de Vaan 2008 s.v.) start from the assumption that the primary reference is to some kind of elongated physical object. More recently Schaffner (2010) has suggested a new etymology connecting Lat. radius with OIcel./ONorw. røðull m. $a$-St. 'glory, halo' (AR), OE rador / rodor m. a-st. 'ether, (radiant, glittering) sky /heavens'. This will be accepted by many Indo-Europeanists, but not by all because it is based on a PIE ablaut álá (largely, it would appear, thanks to OE rodor) that is not acceptable to all. ${ }^{5}$ The present writer also hopes to publish in due course an etymology of

[^5]radius also based on the notion that 'light' is the primary meaning and not suffering from the above deficiency, though it may of course suffer from others. Even if 'light' is established as the primary meaning underlying ray, it remains the case that the word did not come into its own in English until the $17^{\text {th }}$ century, despite being recorded spasmodically since the $14^{\text {th }}$ century (OED s.v. ray sb./1). In other words, for centuries English made do with words conveying notions similar to 'ray of light' that in origin seem to have had nothing to do with glowing or burning. Chief among these are beam and shaft, both recorded in Old English.

OE béam 'tree' is cognate with other Germanic words meaning 'tree' (OFris. bām, OS bōm, OHG boum) as well as Gk. $\varphi$ v́ $\omega$ 'grow' (not 'glow' NB) etc. (Orel 2003 s.v. ${ }^{*}$ baumaz). The English usage, first recorded c. 885 in annal 678 of the Old English Chronicle, is thought to result from a calque of either Latin radius solis or, more probably, columna lucis since this latter phrase is found more than once in Bæda/ Bede (OED s.v. beam sb./1.III.19). (Incidentally Lat. columna is related to Germanic words meaning 'hill', de Vaan 2008 s.v. columen). This usage of beam is better integrated into the language than ray which, perhaps thanks to its associations with science, tends, like radiation, to attract connotations of danger and destruction: e.g. the ray gun of the science fantasy of my youth released a death ray that annihilated its victims; while beam forms romantic-sounding compounds like sunbeam and moonbeam; and a beaming face is a happy, smiling one.

More prosaic is shaft < OE sceaft 'stick, pole, shaft' related to Doric $\sigma \kappa \tilde{\alpha} \pi \tau \rho o v$ 'staff' and further, in all probability, to Goth. skaban 'shear, shave', ON skafa 'scrape, shave', Lith skapiù skõpti 'cut', Gk. $\sigma \kappa \alpha ́ \pi \tau \omega$ 'dig, hack' etc. (Orel 2003 s.vv. ${ }^{*}$ skaftan ~ ${ }^{*}$ skaftaz, ${ }^{*}$ skabanan), verbs indicating actions required to make a shaft or pole and perhaps some of its uses.

Turning away from English, we find NHG Strahl 'ray or beam (of light), glimmer (of hope), jet (of water)' going back to a word (of unknown origin) meaning 'arrow' in the Old Germanic languages (Orel 2003 s.v. ${ }^{*}$ strēlō), though beside OHG strāl is also strāla 'arrow; ray of light', and similar, though phonologically not identical, words meaning 'arrow', or some other missile of aggression, are found also in Baltic and in Slavic, in which latter group 'luminous' meanings are also found in selected languages, e.g. 'lightning' in Slovene, 'ray of light' in Russian and Slovincian (Vasmer/Trubačev 1986-1987 s.v. strelá).

The normal word for 'firewood' in standard Russian is (neut. pl.) drová < PIE ${ }^{*} d r u$-é $h_{2}$, in obvious ablaut to ${ }^{*}$ déru-o-> Russ. dérevo 'tree; wood', both cognate with Gk. $\delta \rho \tilde{c_{c}}$ 'tree; oak', Skt. dru- 'wood', Alb. dru 'wood, tree', Goth. triu 'tree' (e.g. Derksen 2008: 122, Beekes 2010 s.v.). Derksen's gloss 'wood’ for the Russian item is, strictly speaking, inadequate, although Eng. wood can always be substituted for firewood especially in appropriate contexts (e.g. we need to get in some wood for the winter). Besides 'firewood', drová also means 'any fuel for a fire', and this latter is
preferred Muslim and, harking back also to our earlier examples, Mohammed for phonemic Muhammad. PIE no doubt had a closely similar vocalic structure (see further Woodhouse in press b\$2).
the only meaning recorded in the well known pan-Russian dialectal dictionary by Filin (see Filin 1972: 190).

That there might be a connection between Eng. brand and burn is fairly obvious, but brand can also be used poetically for torch and match, words which are or have been connected with the non-burning, non-glowing Latin etyma torqueō 'twist' and (if anything) Lat. myxa or muccus 'mucus' (OED 1971 s.vv. brand sb./I.2, torch sb., match sb./2), respectively.

Finally, firebolt is a relatively unusual word for thunderbolt, the elements of which latter contain the semantic features of 'sound' - admittedly, a sound that is associated with lightning - and 'speeding missile', so that although a thunderbolt is often depicted in visual art as a stroke of lightning, the association of the elements of the word itself with 'glowing' is at best secondary.

Hence, I submit, Kloekhorst has no basis for rejecting the traditional etymology of Hitt. kalmara- 'ray' and kindred words.

## 7. māhla- 'branch of grapevine' and PIE *- $h_{2} n$ -

Kuryłowicz's connection with Gk. (Dor. Aeol.) $\mu \tilde{\alpha} \lambda o v$ 'apple, appletree' is rejected on semantic grounds by both Tischler (1980: 495, n. 4.) and K: 539f. Not everybody is happy about this rejection. Beekes (2010 s.v. $\mu \tilde{\eta} \lambda o v / 1$ ), for example, is tentative ("appears") in his acceptance of it. And if the semantic oddity of Gk. $\varphi \eta \gamma o$ s 'oak' < PIE ${ }^{*} b^{h} e h_{2} g^{\prime}$ - 'beech' (Beekes 2010 s.v.) and many similar confusions of trees and tree names (see especially Cooper 2010) are not sufficient to overturn it, this is probably because the connection between the two concepts begins with the fruit, not with the plants they grow on.

Not all fruit names remain forever rigidly attached to a single variety. Thus ${ }^{6}$ the name of the apricot derives from Lat. persica praecopia literally 'early ripening peach' though in my experience apricots typically differ from peaches in size, colour, flavour, juiciness and smoothness vs. furriness of both skin and stone. And the rotund, yellow-fleshed, yellow-skinned $p a(w) p a w$ appears to derive its name from the often slender, pink-fleshed, greenish-skinned papaya even though the differences between the two fruits are about as great as between pears and apples.

The apple seems particularly prone to lending its name to other fruits and foodstuffs, such as the pineapple in English, the tomato in Italian (pomo d'oro), the potato in French (pomme de terre) and in Southern and Austrian German (Erdapfel). Given the typical discrepancies in size, appearance, flavour, arrangement of seeds (if any) of these various items, including the size and nature of the plants that produce them, it is not particularly surprising to find the apple lending its name to yet another fruit, such as the grape, with which it has quite a bit more in common: both can be similar in skin colour, whether deep red or pale green, in flesh colour (pale green

[^6]to white or colourless) and flavour, as well as in the possession of a small number of seeds per fruit held in a central core - a tougher, more pronounced one in the case of the apple, a rather glutinous, ill-defined one in the case of the grape. Finally, both fruits have been used since antiquity to produce an alcoholic beverage.

The uncertainty surrounding the precise meaning - 'apple' or 'apricot' - of Hitt. ${ }^{\text {GIš }} \operatorname{sam}(a) l u-$ etc., Palaic $\operatorname{saml} \bar{u}(w a)$ - usually glossed 'apple’ (K: 712f.) may also feed into this connection, though from a different perspective. Since the uncertainty actually goes back to the Sumerian equivalent itself and since also there appears to be no independent Hittite word for 'grape' either, the suspicion may well arise that the Hittite adoption of the Sumerogram and other words for 'wine' may in fact conceal a fondness for cider (or perhaps an apricot liqueur), much as in non-genteel Russian usage vinó refers not to wine, but to vodka and perhaps other spirits.

On the formal side, Kloekhorst's reservations about the medial cluster ${ }^{*} h_{2} l>$ Hitt. $h l$, while being admirable (also more generally $\mathrm{K}: 78$ ), may also be overcautious.

In dealing with the general question of intervocalic ${ }^{*} h_{2}+$ consonantal continuant, K: 78 gives three examples of intervocalic ${ }^{\star} h_{2} s>$ Hitt. $h s$, two of ${ }^{\star} h_{2} r>$ Hitt. $h r$, one (this word) of ${ }^{\star} h_{2} l>$ Hitt. $h l$, beside none of ${ }^{\star} h_{2} i$ or ${ }^{\star} h_{2} u$ and apparently equivocal ones of ${ }^{\star} h_{2} n$ and ${ }^{*} h_{2} m$ in n. 161. I see no harm in endeavouring to fill these gaps as follows. ${ }^{7}$

For ${ }^{*} h_{2} i$ we find that in tāyalezil 'theft' < ${ }^{\star}$ teh $h_{2}$-io-til- and tāyela-zi 'steal' < ${ }^{\star}$ teh $h_{2}$ ie/o- (K: 809) we have ${ }^{*} V h_{2} i V>V y V$, prompting the thought that zahhiyela- ${ }^{z i}$ ' do battle with' (K: 1021f.) either represents (somewhat improbably) the second reconstruction ${ }^{*}$ teh $h_{2}$ i-ielo (i.e. with ${ }^{*} V h_{2} V$ ) tentatively proposed by K: 1022 or, being a denominative, has its rather important root final consonant restored by obvious analogy with the noun zahhai-/zahhi- 'battle, war', this latter having presumably also levelled the root final consonant that is apparently natural only in the strong cases.

An adequate idea of the reflex of ${ }^{*} V h_{2} u V$ may be given by the analogical stage ${ }^{*}$ peh $h_{2}$-uén-os (< PIE gen.sg. *ph $h_{2}$-uens 'fire') > Hitt. pahhuen, as proposed by K: 109.

For the nasals K: 78 n .161 has moderately secure examples only for the clusters in auslaut, where they appear to contrast: PIE ${ }^{*} s e h_{2} n>H i t t . / s a ́ H n / s ̌ a-a h-h a-a n: ~ P I E$ *duéh ${ }_{2} m>$ Hitt. /tuấn/tu-wa-a-an, except that the former example has a morpheme boundary within the cluster in question (AR; K: 692) and the latter example would lose the laryngeal by Stang's law (AR; K: 78 n. 161). No doubt wahnu- ${ }^{z i}$ K: 994, also with a strategically placed morpheme boundary, is regarded as being too susceptible to analogical influence to be reliable. Further, K: 78 n. 161, 956f. rejects Kimball's equation of Hitt. wannum $(m)$ iya- with the stem ${ }^{\star} h_{1}$ ueh $_{2}$-no- of Lat. vānus 'hollow, empty' (with cognates in Skt. etc., see de Vaan 2008 s.v.) + appurtenance suffix

[^7]${ }^{*}$-umn- $+{ }^{*}$-ia- on the grounds that (i) the etymology is not as obvious as Kimball has stated (which may be true) and, more to the point, (ii) the appurtenance suffix "is to [Kloekhorst's] knowledge only used as a real ethnicon". Here Kloekhorst has clearly forgotten that among the examples of the suffix (K: 914) he lists Hitt. (dat.-loc. sg.)
 (see also $\mathrm{K}: 346$ ) and arunumanes 'those of the sea', together with comparable items in CLuv., such as tātuwann(i)- 'stepfather'. In other words Kloekhorst actually has no substantive objection to Kimball's excellent equation, nor are we inclined to attribute the assimilation of ${ }^{*} h_{2}$ to ${ }^{*} n$ in ${ }^{*} h_{1} u e h_{2}$-no- > Hitt. wann- to the presence of the morpheme boundary, so that we have, thanks to Kimball, an unimpeachable example of medial PIE ${ }^{\star} V h_{2} n V>$ Hitt. VnnV. This behaviour is similar to that of ${ }^{*} V h_{2} i V$ (the facility with which consonantal /i/ combines with other phones is well known) and contrasts with that of ${ }^{*} V h_{2} r V,{ }^{*} V h_{2} l V$ and ${ }^{*} V h_{2} u V$. The complete assimilation of ${ }^{\star} h_{2}$ in ${ }^{*} V h_{2} n V$ is explicable (pace K: 957) as the eventual outcome of voicing by contiguous nasal. Evidently this is also the mechanism of Stang's law.

Despite the possibility of interference by morpheme boundary in the case of Hitt. ša-ah-h $\quad$ a-an, if it does represent /sáHn/, this word could still exhibit the regular development of auslaut ${ }^{*}-V h_{2} n$ and be compatible with both Stang's law and the contrasting inlaut behaviour ${ }^{*} V h_{2} n V>$ Hitt. VnnV, the difference being attributable to the possibility that auslaut devoicing is more marked in the case of $n$ than in that of $m$ thanks to the greater inherent sonority of the latter. If this indeed proves to be the case, the Hittite phenomena can be compared with similar differences between the nasals exhibited by Phrygian and Vedic (and no doubt elsewhere as well). In Phrygian, $m$ causes dissimilative devoicing of a PIE media whether in direct contact with it ${ }^{8}$ or separated from it by one syllable peak, whereas $n$ only achieves the same feat when in direct contact with the target media and with the assistance, at the same time, of some other factor (Woodhouse 2006: 161-163, 168f., 176, 183). In Vedic, the sequence ${ }^{\star} \mathrm{CmHt}>\mathrm{Ca} N t$, while ${ }^{\star} \mathrm{CnHt}>\mathrm{Ca} t$ (Woodhouse 2011b: 31f.) ${ }^{9}$ with assimilation of the less robust $n$.

The reflexes of intervocalic ${ }^{\star} h_{2}+$ consonantal continuant in Hittite can thus be conceived of as falling into two groups: (i) ${ }^{\star} h_{2} s>h s,{ }^{*} h_{2} r>h r,{ }^{*} h_{2} l>h l,{ }^{\star} h_{2} u>h w$, and (ii) ${ }^{\star} h_{2} i>y,{ }^{\star} h_{2} n>n n,{ }^{\star} h_{2} m>{ }^{\star} m m\left(\right.$ ?) (while in auslaut ${ }^{\star}-h_{2} n>-h n$ and ${ }^{\star}-h_{2} m>-n$ ), the second group being set apart by the well known palatalizing effect of consonantal ${ }^{*} i$ on the one hand and the voicing effects of nasals on the other. Thus there is nothing out of the ordinary in the development of ${ }^{*} h_{2} l>h l$ in māhla-. The long vowel of the root is, in Kloekhorst's reconstruction, the reflex of accented *ó in the

[^8]protoform, following which vowel the preservation of the laryngeal may come as a surprise to newcomers to Kloekhorst's phonology, but other examples of this occur, e.g. at K: $77{ }^{*}$ nó $h_{2} e i>H i t t . n a \overline{h i}$ 'fears'. The root of the Hittite word thus differs in ablaut grade from its southern congeners just as it may in the case of alpa-.

## 8. sūu-, sūwaw- 'full'

K: 794 (cf. also 785, 796, 797) derives this from PIE ${ }^{*}$ souh $_{1 / 3}$ (o) - but at both K: 794 and K: 785 refers to the root as ${ }^{*}$ seu $H$-, which would appear to indicate that formally nothing prevents connection with the root ${ }^{*}$ seuH-reconstructed by Mayrhofer (EWA, 2 s.v. $S A V^{I} / 1$ ) for Ved. sútu- 'pregnancy' and similar items (cf. Tischler's 1980: 506 n. 49 reference to Skt. sūtu- 'full'). Oddly enough, Mayrhofer finds the connection possible, though, following Oettinger, states that the laryngeal would then be ${ }^{*} h_{2}$, which Kloekhorst (K: 786 s.v. sunna- ${ }^{i}$ / sunn- 'to fill') excludes on the ground that ${ }^{\star} h_{2}$ in the environments concerned would yield Hitt. - $h$-, "especially in the $u$-stem adjective: ${ }^{*}$ seuh $h_{2}-u->^{*}$ šūhu-". Although this statement appears to contradict the rule ${ }^{*} V R H V>H i t t . ~ V R R V ~(K: ~ 81), ~ t h e ~ e x a m p l e s ~ f o r ~ t h e ~ l a t t e r ~ s e e m ~$ to indicate that it is true only when $R=$ liquid or nasal. But before we rush to admit that Kloekhorst is right to reject this connection, it is pertinent to revisit Oettinger's reasons for positing $h_{2}$ in the first place.

It turns out that Oettinger's (1979: 78 and n. 49) reconstruction of ${ }^{*}$ seuH- 'fill' with ${ }^{*} H={ }^{\star} h_{2}$ is based entirely on internal Anatolian considerations, namely the possibility that Palaic 3. sg. pret. sūnat might derive from ${ }^{*}$ suné $_{2}-t$, since according to an observation of Calvert Watkins similar Palaic formations show sporadic preservation of intervocalic ${ }^{\star} h_{2} i$ as $\langle g\rangle$ (see also Melchert 1994: 212f.). But no such form of Palaic sūna-containing this $g$-reflex appears to be attested, so for the time being the explanation of K: 785 for $a$-vocalism < PIE *ó is valid for both the Hittite and the Palaic words.

If, on the other hand, a putative Palaic *sūnaga- 'fill' does some day come to light, forcing reconstruction with ${ }^{\star} h_{2}$, it is worth noting that Kloekhorst provides no supporting example of his statement regarding the preservation of ${ }^{\star} h_{2}$ as Hitt. $h$ in the precise environment ${ }^{*} V u \_u$ found in ${ }^{*} s e u h_{2}-u$ - at K: 77 (supra), where instances of $V=u$ are nevertheless to be found among the examples of ${ }^{*} V h_{2} V$. As things stand therefore, we are given no reason to suppose that ${ }^{*} h_{2}$ would be preserved as ${ }^{* *} h$ in this sequence.

Worse still, a neat parallel for the failure of a back fricative to survive in the environment of enclosure by the high back resonant $u$ in Hittite is provided by the situation in Indo-Aryan Sindhi, where the presumably fronted Indo-Aryan reflex of the PIE laryngeals fails to leave any trace of itself in the environment of enclosure by the high front resonant ${ }^{*} i /^{*} y$. That is to say, while ${ }^{*} u H y a$ and ${ }^{*} a H y y a>$ Sindhi $u^{\beta} j a$ and $e^{\curvearrowright} j a$, respectively, both with preglottalization of the voiced palatal stop, ${ }^{*} i H y a>$ Sindhi $i j a$ without preglottalization (Woodhouse 2009: 99-108). It also fits with evidence I have adduced elsewhere (Woodhouse 2008: 262) that
the environment of flanking like sounds can cause some weakening of the enclosed sound, even to zero.

Consequently, I see no reason not to propose the regular loss of ${ }^{*} h_{2}$ in the strong protostem ${ }^{*}$ Souh $_{2}-u$-. From there the same loss can have spread to the weak protostem ${ }^{*}$ souh $_{2}$-ou-, which lacks the critical environment.

Other relevant environments affecting the loss or preservation of ${ }^{*} h_{2}$ in the Hittite reflexes of this root are provided by our amended protoforms of the associated verb (these are based once again on Kloekhorst's), viz. ${ }^{*}$ su-nó- $h_{2}-e /{ }^{*}$ su-n- $h_{2}$-énti. The laryngeal would indeed be preserved in the first of these protoforms but not in the second with its clear ${ }^{\star} V R h_{2} V$ sequence $>V R R V$, and this could also have led to levelling of the $h$-less stem, as Kloekhorst possibly allows for in his formulation "especially in the $u$-stem adjective" cited above.

It seems therefore that either (i) we currently have no reason to assume that $H=h_{2}$ in our PIE protoform ${ }^{*}$ seu $H$ - or (ii) we have ample means of explaining the disappearance of $h_{2}$ in the Hittite progeny of the same root. All of which, contra Kloekhorst, allows reinstatement of the semantically satisfying connection with Ved. sútu- 'pregnancy'.

## 9. tarra- ${ }^{\text {tta(ri) }}$ 'be able' and tarhu-zi 'id.; be powerful, overpower, conquer'

Tischler (1980: 504 n .44 ) (together with many other scholars) clearly regards these two as related on the basis of their shared meaning 'be able'. K: 832f., 836-838, however, seems anxious to separate the two on the basis of what he convincingly argues to be a false reading of tar-Vh-forms as ${ }^{\star \star}$ tar- $a h={ }^{* *} / \operatorname{tarH}-/$ allegedly $<$ PIE ${ }^{*}$ terh $_{2}{ }^{-}$ when, as synonymous spellings with tar-hu show, the correct reading is tar-uh = $/$ tarHw-/ < PIE terh $h_{2}$-u- and the correct outputs of PIE ${ }^{\star}$ terh $h_{2}$ - would be Hitt. tarr- in athematic forms and (unattested) Hitt. *terh- in thematic forms.

So far so good, but then Kloekhorst attempts to draw a semantic distinction to back up the formal one and it is here that he goes sadly astray, claiming that the "unextended root [**erh $\left.2_{2}-\right]$, which was thought to be the predecessor of Hitt. 'tarh-', does not mean 'to overpower', ... but 'to cross, to pass through' only (Skt. tari'to pass through', Lat. trāns 'past, over')" (K: 837). Kloekhorst has evidently quite forgotten that at K: 832 f. he derives from the same root ${ }^{*}$ terh $2_{2}$ " ${ }^{\text {Skt. tiráte, tárate }}$ 'to overcome', Lat. trāns 'across, through'" and Hitt. tarra- ${ }^{\text {tta(ri) ' }}$ be able', and that his "Skt. tar ${ }^{i}$ - 'to pass through'" is the same as his "Skt. ... tárate 'to overcome'" which he correctly notes as a hapax in the RV. The word actually occurs unaccented at RV 1.140.3 (as 3.du. tarate abhí) and for this precise occurrence Monier-Williams (1899: 62C s.v. abhitr̄ abhi- $\sqrt{t r \bar{i}})^{10}$ glosses it 'to come near, approach', which I see little reason to change.

[^9]Despite these discrepancies K: 837 blunders on:
So also semantically it has become clear that an analysis /tarH-/ is impossible: there would be no way to explain its meaning 'to conquer' from PIE ${ }^{*}$ terh $h_{2}$ - to pass through'.
The meaning 'to conquer' is only explicable from PIE ${ }^{\star}$ terh $_{2}-u$ - 'to overpower' ...
Since, in addition, Monier-Williams (1899: 454b s.v. $\operatorname{tr} \operatorname{tr} \bar{i})$ glosses the occurrences of the basic verb without $a b h i$ in the Rigveda thus: (active:) 'to pass across or over, cross over (a river), sail across; to surpass, overcome, subdue, escape; to acquire, gain'; (middle:) 'to contend, compete; to carry through or over, save', and the RV meanings of of 2.sg. tūrvasi thus: 'to overpower, excel' (ibid. 451 b s.v. turv); and since the semantic progression from 'pass' to 'conquer' could hardly be clearer: 'pass through/ over/across' $\rightarrow$ 'leave behind' $\rightarrow$ 'overtake' $\rightarrow$ 'surpass' $\rightarrow$ 'outdo, excel' $\rightarrow$ 'defeat' $\rightarrow$ 'overcome, overpower' $\rightarrow$ 'conquer' etc., I think it is clear that Kloekhorst's attempt to separate these two intertwined roots on semantic grounds is a failure. Whereas those who, like Kümmel ( $\operatorname{LIV}_{2}$ : 633), regard the $u$-forms as owing their origin to a $u$-present of the root without ${ }^{*}-u$ have infinitely more justice on their side.

## 10. idālu- 'bad, evil; evilness'

K: 421f. derives this from PAnat. Peduo-(l-), hence Tischler's (1980: 502 n. 34) etymologies based on Greek words beginning áïi- and aì- are ruled out. Kloekhorst rejects the idea that the independent derivations by Watkins and Rasmussen of a heteroclitic -uōl-/-uen-stem based on PIE $h_{l} e d$ - 'eat; bite' should form the basis for the Hittite $u$-stem adjective and noun and focusses instead on an $l$-derivative of the PAnat. adj. *?eduo- 'bad, evil', which is probably right despite the frequent plene writing of the al-syllable both in the Hittite word and in CLuv. nom./acc. sg. $a$-ad-du-wa-a-al (Melchert 1993: 41).

This of course leaves these words without any extra-Anatolian congener, Rasmussen's proposed connection with Toch.B yolo being reported at K: 422 with evident lack of enthusiasm. I would like to suggest that a possible candidate to make up this
 Woodhouse in press a \$5.1.1) would then be an instrumental in ${ }^{*}$ - $h_{1}$ with the meaning 'with difficulty, hardly' of the PIE $o$-stem antecedent ${ }^{*} h_{1} e d^{h} u o$ - 'bad, hard, difficult' of the above PAnat. adjective, a derivation that seems to be without any impediment, either formal or semantic, if the semantic development of PAnat. *Peduo- can be amended to *'hard, difficult' > 'bad, evil' or, alternatively, that of PSI. *ed(z)và to the reverse, *'bad, evil' > 'hard, difficult'.

## 11. tarai- ${ }^{\text {i }}$ /tari- 'become weary'

K: 833-835 derives this from PIE ${ }^{*}$ Tr-oi- $/ *$ Tr-i- for which he can find no satisfactory IE equivalent. It is unclear why Kloekhorst limits the search to etyma with PIE ${ }^{\star} d$-.

If that eccentricity is abandoned then it appears there can be no substantive objection (surely not the difference of diathesis?) to connecting with Gk. (Hom.) $\tau \varepsilon i \rho \omega$ 'wear away, fatigue', for which Beekes (2010 s.v.) presents mixed messages regarding a root ${ }^{\star} t e r(H)$ - or ${ }^{\star}$ terh $_{1 / 3}$ - found also in $\tau \varepsilon \dot{\varepsilon} \rho \eta v, \tau \varepsilon ́ \rho v \varsigma, \tau \varepsilon \tau \rho \alpha i v \omega, \tau \iota \tau \rho \omega \dot{\sigma} \sigma \omega, \tau \rho v \dot{\omega} \omega$ and $\tau \rho \bar{i} \beta \omega$, of which it is said (ibid. s.vv.) that $\tau \dot{\varepsilon} \rho \eta v$ and $\tau \dot{\varepsilon} \rho v \varsigma$ represent the root without laryngeal, that $\tau \varepsilon \tau \rho \alpha i v \omega$ (with secondary suffix) and $\tau \rho \bar{\imath} \beta \omega$ have $h_{l}$, while $\tau \iota \tau \rho \omega \dot{\sigma} \kappa \omega$ (which one would imagine to be the evidence for the posited $h_{3}$ ) derives from a "Pre-Greek" substrate (i.e. a non-IE substrate, ibid. xiv), and $\tau \rho v^{\prime} \omega$ reflects ${ }^{\star} t r u H$-, i.e. ${ }^{\star} t e r$ - with two separate extensions, the unextended root thus being represented probably in $\tau \varepsilon i \rho \omega$ itself and certainly in Hitt. tarai-/tari-.

## 12. henkan- 'death, doom, etc.' hai(n)k- ${ }^{\text {tta(ri) }}$, hink- ${ }^{a(r i)}$, hi(n)k- ${ }^{z i}$ 'bestow; bow'

K: 268-271, 339f. unimpeachably brackets these together and finds the earliest Hittite form to be hai $(n) k_{-}{ }^{\text {tta(ri) }}$ reflecting ${ }^{\star} h_{2 / 3}$ einK-, in which, says Kloekhorst, the nasal infringes both PIE root structure and Hittite nasal infixation, partly formally, partly by having middle forms.

Now, the possession of middle forms is not a particularly severe objection because Hitt. huni(n)k- 'bash; crack' combines middle forms with the regular nasal infixation (K: 363).

As to nasal infixation itself, it should be noted that beside the five nasal infixing verbs with the same nasal structural alternation exemplified by hunikC- ~huninkV(K: 153f.), there is a verb with apparently original root nasal having the same alternation, viz. ${ }^{*} h_{l}$ léng ${ }^{h} t i \sim{ }^{*} h_{l} l^{\prime} g^{h}$ énti $>$ likzi $\sim \operatorname{linkanzi}$ (K: 526-528; cf. the comparison of these different types of verbs at K: 269). Apart from these six verbs, the only other Hittite verb exhibiting the root or stem structure (-)Ci(n)k- that I can find in Kloekhorst's book is in fact our zero-grade $h i(n) k$-. It seems therefore very likely that this verb acquired its nasal alternation by analogy with these six and from there passed it on to the full grade forms. In other words we need to consider not Kloekhorst's proposed nasalized ${ }^{\star} h_{2 / 3} e i n K$ - but simply PIE ${ }^{\star} h_{2 / 3} e i K$-.

If it is accepted that a successful act of bestowing involves a parallel act of desiring on the part of the receiver of the gift - cf. the similar parallelism or double semantic involved in the usual connection of Hitt. $d \bar{a}-{ }^{i} / d$ - 'take' with Gk. $\delta \iota \delta \omega \dot{\omega} /$ etc. 'give' ${ }^{\prime 11}-$ a possible connection that leaves the anlaut laryngeal not precisely determined is with PIE *Heiğh- 'desire' seen in Ved. (AV) ehá- 'desirous', Av. aēza- 'desiring', aēzah- 'desire', reduplicated zero grade in Ved. 3. sg. act. īhati (Khila 2.10.5, see Macdonell 1910: 320), 2. sg. mid. sam îhase (VS) 'desire', GAv. 1. sg. iziiā 'id.', Gk. ì $\chi \alpha v \alpha ́ \omega$ 'id.' (Mayrhofer EWA, 1 s.v. $E H$ ), ĩ $\chi \alpha \rho$ 'desire' (with long ı, Beekes 2010: 606) or unreduplicated zero grade in Gk. ' $\neq \alpha \rho$ 'id.' (with short t , Beekes 2010: 183). If, of course, the notion of a PIE

[^10]root vocalic series $e i: e u: e$, such as has been recently revived by Levickij (e.g. 2003: 100) can be envisaged then a connection of sorts can be made with the less securely based parallel root ${ }^{*} h_{2} e \hat{g}^{h}$ - that one might wish to see as ${ }^{\star} h_{2} e-h_{2} \hat{g}^{h}$ - in Gk. $\dot{\alpha} \chi \dot{\eta} v$ 'needy', Av. $\bar{a} z i-$ 'desire' (cf. Beekes 2010 s.v. $\dot{\alpha} \chi \eta \dot{\eta} v$ ), which would indicate ${ }^{*} h_{2}$ for the anlaut.

A similar double semantic involving 'bestow' and 'acquire' sets up a connection between our Hittite word and PIE *Heik- 'acquire' > Ved. mid. íśe 'own, possess; dispose of, ${ }^{12}$ be valid or powerful; be master of; command; rule, reign' and also 'belong to' (which can = 'be bestowed on') (Monier-Williams 1899: 171a), Goth. aih 'I have', aigun 'they have', Eng. own etc. (Mayrhofer EWA, 1: 207). Note that Orel (2003: 6 s.v. aixa) adds Toch. B aik- 'know, recognize' - which is remarkably similar to somewhat old-fashioned meanings of Eng. own 'admit, confess, recognize', current Eng. own ир 'confess (to some wrongdoing)' - which is no doubt the reason Mayrhofer (l.c.) reconstructs with anlaut ${ }^{\star} h_{2}{ }^{13}$

A third possibility arises from the custom of bestowing gifts on a departing guest, certainly a common enough ritual in the Greek epic (e.g. Odyssey 13: 1-77), and the supposition of a semantic chain 'bestow (a gift)' $\rightarrow$ 'bestow gifts as part of the ritual of sending away' $\rightarrow$ 'send (a person) away/dismiss', which facilitates connection with (middle/reflexive) Gk. ol' $\chi o \mu \alpha l\left(<^{*} h_{3}\right.$ eig ${ }^{h}$-) 'go (away), leave, disappear, die'. The change of dimensional detail here is about the same as that between Hitt. li(n)k-zi swear an oath; utter (a statement) under oath' and its generally accepted Greek cognate $\dot{\varepsilon} \lambda \varepsilon ́ \gamma \chi \omega$ 'disgrace; question (a person)'.

Of the three etymological possibilities canvassed here, the best would seem to be the second, with the striking coincidence of one meaning of the Vedic congener î́śe (viz. 'belong to') as a possible passive to the Hittite 'bestow'.

## 13. Word final *-i regularly $>$ Hittite $\emptyset$ ?

Based on the imperatives $i$-it 'go!' ${ }^{*} h_{1} i d^{h} i$ and te-e-et 'speak!' $<^{*} d^{h}{ }^{e} h_{1} d^{h} i$, Kloekhorst (91, 80o) formulates a general rule that word final $-i$ is regularly deleted in Hittite and that the innumerable instances in which it is preserved are due to restoration. Why -i should be restored in many instances once it has disappeared is not explained and seems impossible - where would be the model? - which raises a suspicion that the loss of this final $-i$ is specific to certain morphological categories. For the imperative of the 2 . sg. act. this can be verified by a quick check of the forms given in Friedrich (1974: 78-107) which show that these imperatives are formed in Hittite in the following ways:

1) many are simply the bare stem (as defined by Friedrich): (mi-conj.) es 'be!', ep 'seize!', ses ‘sleep!', wek 'demand!', eku 'drink!', et 'eat!', wa-al-ah 'strike!', har-ak

[^11]'hold!', istamas 'listen!; (hi-conj.) obey!', punus 'ask!', suppiyah 'purify!', hatrāi 'write!', hand $\bar{a} i ~ ‘ f i x!', ~ i y a ~ ‘ m a k e!' ; ~ a k ~ ' d i e!', ~ d \overline{a ~ ' t a k e!', ~ d a ̄ i ~ ' p l a c e!', ~ p a ̄ i ~ ' g o!', ~ h a l z a ̄ i ~}$ 'call!', tarna 'leave!', sarri 'separate!', uda 'bring!', au 'see!';
1a) some apparently with a change in the quantity of the root vowel, although this does not emerge with particularly clarity from an examination of all the cited forms of the verbs: (hi-conj.) sāk 'know!', peda 'deliver!';
2) a number have the (sometimes optional) suffix -i added to the stem: (mi-conj.) nahi ‘fear!', kuen(n)i 'kill!', li-in-ik / li-in-ki ‘swear!', lāi 'release!', azzikki ‘feast!', zikki ‘lay!', regularly so in verbs in -sk-: peski 'give!', uski ‘see!', akkuski ‘drink!'; (hi-conj.) pahsi 'protect!' or
2a) the same suffix replacing stem-final $-a$ : (hi-conj.) memi 'speak!', ūnni 'send here!', penni ‘send away!', uppi ‘send (here)!';
3) some have the optional suffix -iya: (mi-conj.) kar-ap(-pi-ya) 'lift!; take ... away!'; (hi-conj.) nāi/neya 'lead!'; (mixed conjugation) sāi / siya 'seal! etc.', sunni / sunniya 'fill!';
4) with and without assimilation of an internal nasal, including dropping of an infix, are: (mi-conj.) sa-an-ha / sa-a-ah 'seek!' (sanh-), harnik 'destroy!' (harnink-), ninik 'move!' (ninink-);
5) with suffix -t: (mi-conj.) te-e-et 'speak!', especially causatives: arnut 'bring!', pahhassanut 'secure!', as(sa)nut 'have done with...!, take care of ...!, deliver!'
6) with several of the above variants: (mi-conj.) uwate / uwati / uwatet 'bring (here)!'; (hi-conj.) essa / essi /issa 'effect!'; (mixed conjugation) dala / dali ‘let!, leave!'.

It is clear from this catalogue of forms that, with the exception of type 3, no imperative suffix consists of more than one phoneme, many imperatives have no suffix at all, while others have the shortened form of the stem (type 4). Even type 3 would be no exception if it is ever found to conceal a hitherto unidentified particle that is occasionally suffixed to the imperative, like Biblical Hebrew -ná (-nó) or Russian $-(t) k a$ or $\check{z} e$ which latter might offer a parallel with the Hitt. conjunctive particle (y)a. However that may be, keeping imperatives short in the manner of all the other types is of course not restricted to Hittite - cf. Lat. fac 'make!', dīc 'say!', dūc 'lead!', fer 'bear!', beside eme 'buy!', cape 'take!' and Russ. sjad' 'sit (down)!', ljag 'lie down!', bros' ‘stop it! / give it up!', poj ‘sing!', znaj 'know!' beside idí 'go!', sidí 'remain seated!', poí 'let drink!', ne kolébli ‘don't shake! (trans.)'. It may be of interest to note that not all these kinds of shortenings result in monosyllabic forms, cf., e.g. (prepositional) compounds of Lat. fac, dīc, dūc, fer and Russ. dozvól' 'let/allow (me)!, prisjád' 'take a seat! / curtsey!', prinimáj 'take!', rasprodáj 'sell off!' etc. ${ }^{14}$

[^12]It seems therefore that the final ${ }^{*}-i$ is lost in imperatives reflecting PIE ${ }^{*}-d^{h} i$ due to the allegro shortening typical of this morphological category. It may be noted that just as in other languages these shortenings do not necessarily result in monosyllables, thus Hitt. harnik, arnut, pahhassanut, as(sa)nut, uwatet etc. above.

Another morphologically conditioned apocope of ${ }^{*}$ - $i$ concerns the one inescapably reconstructed for the ablative ending -az (K: 231f.) since nominal case endings in Hittite are synchronically overwhelmingly monosyllabic. Note that it is the endings that are monosyllabic, not, as a rule, the nouns of which these endings form a part, any more than the imperatives of verbs lacking a final -i are necessarily monosyllabic.

These two different categories are, I think, sufficient to secure the rule.

## Conclusion

While there can be no question that Kloekhorst's remarkable dictionary represents a giant step forward in Hittite linguistics, it is also true that it bears a few less than fortunate marks of the reformer's zeal and, as is to be expected for such a work achieved by a lone scholar in so short a space of time, one or two signs of haste. If the book is found to be improved by any of the suggestions presented here, then it will be gratifying to this author to have contributed something, however small, to so signal a work.

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[^0]:    * I am grateful to an anonymous reviewer for many helpful comments that have contributed greatly to the improvement of this paper. These are acknowledged in what follows by the abbreviation AR.

[^1]:    ${ }^{1}$ In doing this Kloekhorst seems to have forgotten that in adopting and providing further evidence for Kortlandt's suggestion that one solution to vanishing ${ }^{*} h_{2}$ and ${ }^{*} h_{3}$ in Hittite (and Anatolian in general) is that ${ }^{*} \mathrm{Ho}->{ }^{*} h_{1} \mathrm{O}->$ PAnat. ${ }^{*} \mathrm{O}$ - (K: 75 and 161-232 passim) he has ensured the redundancy of " $h_{i}$ " anyway and need not mention it again. This occasional forgetfulness, to which this paper is probably largely a memorial, seems very understandable in the circumstances of getting so large an undertaking completed within the constraints of a normal PhD. Another very clear example will be found below at $\$ 7$.

[^2]:    2 I do not see any need for scepticism either about the o-grade in this word or about the conclusion that ${ }_{h_{2}} \mathrm{O}->$ Hitt. $\check{\bar{a}}$ - on the alleged ground that an o-grade cannot be guaranteed in any of the material for which this rule is invoked. The alternative that has been urged is to reconstruct ${ }^{*}\left(h_{1}\right)$ alb $^{h}$ - to account for the lack of Hittite $h$ - (and perhaps with a view to including OHG albiz / elbiz 'swan', PSlavic *olbōdь / *olbōtt / *elbedo / *elbọtts 'id.' although the problems of these words are well known - Derkson 2008: s.v.) which really presents a choice between different reconstructions of PIE: one possessing phonemic ${ }^{*} a$ and lacking the rule ${ }^{*} h_{2} 0->$ Hitt. $\check{\breve{a}}$-, the other being the alternative adopted here. The intention of this paper, which is set aside in only a very few instances, is generally not to correct Kloekhorst's historical phonology of Hittite but to suggest some instances where Kloekhorst has not followed his own prescriptions, a phenomenon no doubt bound up to some extent with the history of composition of the work.

[^3]:    3 Nevertheless, an alternative possibility suggests itself if the designation arose in connection with the use of shells as currency (cf. Lat. currō 'run') since the 'drive' root ${ }^{*} h_{2} e \hat{g}$ - produces derivatives such as ${ }^{*} h_{2} 0 \hat{g}-m o->$ Ved. ájma- 'Lauf, Bahn, Zug', ${ }_{2} h_{2}$ eğ-io- MIr. aige ‘das Treiben, Rennen, Wettlauf' (cf. Irslinger in NIL: 268f.).

[^4]:    4 Schrijver's (apud de Vaan 2008 s.v.) (and Walde/Hofmann's 1965 s.v.) proposed connection with ${ }^{*} h_{2} r$ - (/ *ar-) 'fix' is of course similarly impossible.

[^5]:    5 Even the typological argument in favour of PIE ${ }^{*} a$ is a nonstarter. The $\operatorname{Tel}(l)$-el-found at the beginning of versions of Middle Eastern placenames, such as Tel(l)-el-Amarna and Tel(l)-el-Kebir, reflects two instances of the "elsewhere" allophone of the solitary non-high vocalic phoneme of Written Arabic generally denoted /a/ by Western linguists. This phoneme has "conditioned" allophones that Indo-Europeanists might well write $a$ and $o$ in the vicinity of certain sets of consonants and is opposed to two high phonemes denoted by linguists /i/ and $/ \mathrm{u} /$ but often rendered $e$ and $o$ by Westerners, as in the variant Moslem for nowadays

[^6]:    ${ }^{6}$ In what follows I confess to some reliance on the etymologies edited by Charles R. Sleeth in Gove 1961 s.vv.) and other standard handbooks.

[^7]:    7 Kloekhorst's treatment of these matters is somewhat bedevilled by a tendency to regard these resonants now as resonants, now as vowels. Thus in Kloekhorst's first table of laryngeal developments (K: 75) $R$ includes resonants which must have been syllabic in the protolanguage (see examples K: 76 supra) whereas in the remaining tables ( $\mathrm{K}: 76-81$ ) such resonants are liable to be covered by $V$, e.g. ${ }^{*}$ péh $h_{2} u r,{ }^{*} h_{2} u h_{2} O$ - as examples of ${ }^{*} V h_{2} V$ (K: 77 supra), and even resonants that would have been consonantal under Beekes' law can be treated similarly, e.g. ${ }^{*} u h_{2}$ génti $\gg$ wa-ak-kán- $z i$ as an example of ${ }^{*} V h_{2} T$ (K: 77 infra ).

[^8]:    8 This bizarre behaviour is characteristic of Phrygian and well documented, and is in complete contrast with the common opposite situation in Greek where $\mu$ frequently voices or assimilates a contiguous voiceless stop.
    9 Further examples are dhvāntá- 'dark' (from which Mayrhofer's EWA, 1 s.v. DVHAN ${ }^{I}$ 'smoke' may be a backformation) to dhūmá- 'smoke' and possibly śvānta- of uncertain origin and meaning; Skt. änchati ‘stretch, draw into position' to a root in ${ }^{*}-m H$ - (ibid., 3: 20) might point to a broader rule but in view of Skt. läñchita- 'marked' and Ved. väñchati 'wish' it is more probable that nasality was preserved before the continuant ${ }^{*}$ s of the suffix ${ }^{*}$-s $\hat{k}$ - and reemerged as the homorganic nasal when ${ }^{\prime}{ }^{\prime} c>c h$.

[^9]:    ${ }^{10}$ Here and elsewhere the double citation of the citation form indicates the normal transliteration of the Devanagari entry followed by Monier-Williams' usefully analytical, but no longer standard transliteration.

[^10]:    ${ }^{11}$ A similar double semantic is found in NHG borgen both 'borrow' and 'lend'; and in derivatives of the Arabic root šry: both the base stem and stem VIII ( $t$-reflexive) mean equally 'sell' and 'buy' (Wehr/Cowan 1961 s.r.), perhaps both can be comprehended under a neutral term such as 'trade (to/from)' (despite the un-English syntax).

[^11]:    12 Note also the double semantic of this expression: 'have at one's disposal' = 'possess' and 'get rid of' = 'no longer possess'.
    ${ }^{13}$ Probably only a wag would consider connecting to Lat. īcō 'encounter, wound' (<* $h_{2} i-h_{2} i \hat{k}-\dot{e}-$, $\mathrm{LIV}_{2}$ s.v. ${ }^{\star} h_{2}$ eik-) on the basis of a putative semantic shift from 'bestow a wound' to 'bestow (a gift).

[^12]:    ${ }^{14}$ An apparently similar phenomenon in NHG (geh'/ gehe 'go!', komm'/ komme 'come!', besuch'/ besuche 'visit!', verschling'/ verschlinge 'swallow!') is probably simply part of a general centuriesold tendency to drop final $-e$, e.g. in the $15^{\text {th }}$ century title of the hymn Es ist ein Ros entsprungen for ...eine Rose... (however, ein for eine is no doubt an Early NHG hangover from MHG usage as in Martin Luther's Ein feste Burg ist unser Gott), though perhaps more often sanctioned orthographically in recent times, cf. Schlaf wohl, Mauer, ich wecke dich nicht 'Sleep well, wall, I'll not wake you' (Herman Hesse, Der Steppenwolf, Suhrkamp Taschenbuch 175, 1974: 44).

